

REMARKS

Claims 1-36 are all the claims pending in the application. Claims 1-8, 13-18, 23-28, and 33-36 are rejected. Claims 1, 14 and 23 are amended. Claims 9-12, 19-22, and 29-32 are withdrawn from consideration and have been cancelled. Applicants respectfully submit that with these amendments, the application now is in condition for allowance.

Election/Restriction

The Examiner has noted the Applicants' election of claims 1-8, 13-18, 23-28 and 33-36 for examination. The Examiner has advised that the remaining claims are withdrawn. Applicants have cancelled the non-elected claims and reserves their right to file a divisional application under 35 U.S.C. § 121.

Information Disclosure Statement

The Examiner has noted that references JP 5-49736 and JP 2-38659 have not been considered because English language abstracts have not been submitted. Applicants note that these references are issued patents corresponding to published applications JP 63-157832 and JP 63-192850, respectively. The two applications were accompanied by English language abstracts and have been considered by the Examiner, according to his notation on the accompanying forms 1449. Thus, no further submission is needed. Applicants apologize for any confusion.

Claim Objections

The Examiner objects to claims 1, 14 and 23 because they recited limitations that are considered redundant. The terms “, or a mixture of” and “two or more of” are deleted from amended claims 1, 14, and 23, in order to make the present invention clear. Thus, Applicants submit that these amendment serve to overcome the objections.

Claim Rejections - 35 U.S.C. § 112

Claims 1-8 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is traversed for at least the following reasons.

The Examiner notes that it is unclear whether the language of these claims relating to a “group” relates to alloys of a single metal or the chemical “group VI.” Applicants have amended

claim 1 so that that the phrase “and an alloy of a molybdenum group and a tungsten group” is changed to --molybdenum alloys and tungsten alloys in order to make the phrase clear.

Thus, the rejections of claims 1-8 and 13 should be withdrawn.

Claim Rejections - 35 U.S.C. § 102

Claims 1-3, 6-8 and 13 are rejected under 35 USC 102(b) as being anticipated by Dubetsky 4,259,061). This rejection is traversed for at least the following reasons.

First, Applicants note that claim 1 has amended the phrase “so as to inhibit exposure of the base material” is amended to read --, the exposure of a base material is equal to or less than 1% of a unit area of the oxide coating layer--. This amendment is based on the description page 13, lines 14 to 21 of the specification. According to this limitation, an exposure rate of the base material under the oxide coating layer is reduced to one percent or less.

The advantages of the structure are easily understood from the description at page 12, lines 13 to 20 of the specification. Specifically, since a reaction does not take place between the base material and a processing object, the processing object can neither melt nor adhere to the base material. Thus, the resultant refractory metal plate can be manufactured without degrading the performance of the base material, i.e. molybdenum plate.

On the other hand, Dubetsky neither suggests nor teaches that the exposure of a base material should be equal to or less than 1% of a unit area of the oxide coating layer.

Accordingly, amended claim 1 is not taught in Dubetsky.

In addition, Claims 2-8, and 13 depending from amended claim 1 should be considered patentable

Moreover, with respect to claim 2, Applicants note that the specific structure of claim 1 can be obtained under conditions described in claim 2. Specially, the claim states that -- at least one kind of said oxide powders is set to 10 μm or less-- and --a heat treatment is carried out at a temperature depending on the grain size of said powder—. The advantages according to the structure of claim 2 may be understood from the Embodiments in Tables 2 and 4, of the

specification. Table 2 shows that reference samples Nos. 15, 16, and 21 have grain sizes of 30 μ m larger than samples Nos. 1 to 12 of the present invention, so that a coating layer may be ready to peel, products may be ready to be welded, and warping may easily take place.

On the other hand, Dubetsky is silent about reducing exposure rate. Therefore, Claim 2 is not taught by Dubetsky.

Claim Rejections - 35 U103

Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dubetsky (4,259,061). This rejection is traversed for at least the following reasons.

These claims are patentable due to their dependence on patentable claim 1. Moreover, neither these claims nor their parent would be obvious because nothing in Dubetsky teaches or suggests the limitations added to claim 1.

Claims 14-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dubetsky (4,259,061). This rejection is traversed for at least the following reasons.

Applicant has amended independent claim 14 to add the limitation added to claim 1. As already noted, nothing in Dubetsky teaches or suggests that the exposure of a base material is equal to or less than 1% of a unit area of the oxide coating layer. Claims 15 to 18, which depend from amended claim 14, are not taught from Dubetsky, either.

Claims 23-28 and 33-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dubetsky (4,259,061) in view of JP 63-157832 (Takabe et al). This rejection is traversed for at least the following reasons.

Claim 23 has been amended to add a structural limitation similar to that added to amended claims 1 and 14. Advantages similar to those described in conjunction with amended claim 1 would also be obtained.

On the other hand, Dubetsky neither suggests nor teaches that the exposure of a base material should be equal to or less than 1% of a unit area of the oxide coating layer, as already described. Takabe et al does not remedy this deficiency.

Amendment under 37 C.F.R. § 1.111
Application No. 10/784, 678

Although Takebe et al teach a molybdenum plate containing lanthanum or lanthanum oxide of 0.1 to 1.0wt%, Takebe et al does not teach that the molybdenum plate has an oxide coating layer formed on the surface of the plate. Moreover, Takabe et al clearly does not teach or suggest reducing the structure that the exposure of a base material that is equal to or less than 1% of a unit area of the oxide coating layer.

Accordingly, amended claim 23 is not taught by Dubetsky and Takebe, either alone or the combination thereof.

In addition, Claims 24 to 28, which depend from amended claim 23, similarly are not taught from Dubetsky and Takabe et al.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

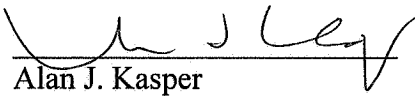
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